

Work Order ID 52465

Friday, September 25, 2009 9:25:36 AM



Page 1

Item ID: D3121-141

Accept



Setup Start



Revision ID: E

Stop



Item Name: Bracket Assembly

Start Date: 9/25/2009 Start Qty: 18.00



Cust Item ID:

Required Date: 10/6/2009 Req'd Qty: 18.00



Customer:

Reference:

Approvals:

Process Plan: *RL*Date: *09/25*

Tooling:

Date:

Run Start

QC: *W*

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3121

Rev E

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: (1.250" x 2.000") 6.600" long

*SL 09/10/03**18*

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Machine D3121-111 as per Folio FA361 and Dwg D3121 Identify as D3121-111
2-Deburr 3-Scribe batch number*SL 09/10/05**18*

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

*SL 09/10/05**18*

Work Order ID 52465

Friday, September 25, 2009 9:25:36 AM

Page 2

Item ID: D3121-141

Accept

Revision ID: E

Item Name: Bracket Assembly

Start Date: 9/25/2009 Start Qty: 18.00

Required Date: 10/6/2009 Req'd Qty: 18.00

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

JIN 09/25/09

18

140

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

Assemble D3121-141 as per Dwg D3121.

ES 09/10/06 (18)

150

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

27 S 09/10/06

(18)

Work Order ID 52465

Friday, September 25, 2009 9:25:36 AM

Page 3

Item ID: D3121-141

Accept

Revision ID: E

Item Name: Bracket Assembly

Start Date: 9/25/2009 Start Qty: 18.00

Required Date: 10/6/2009 Req'd Qty: 18.00

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Identify as per dwg & Stock Location: 235A

0.00



Packaging

Memo

0.00

Packaging

170

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/25/09 (18)

09/25/09
R 09-10-6

Picklist Print

Friday, September 25, 2009 9:25:36 AM

Page 1

Work Order ID: 52465

Parent Item: D3121-141RevE

Parent Item Name: Bracket Assembly

Comments:

Start Date: 9/25/2009

Required Date: 10/6/2009

Start Qty: 18.00

Required Qty: 18.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3121-241RevE		Manufactured	No			100	Each	34.0000	18.0000			
---------------	--	--------------	----	--	--	-----	------	---------	---------	--	--	--



Bearing Assembly

Warehouse	Loc Qty	Loc Code
Location		

Main Warehouse

ST	34	
----	----	--

46169	34	
-------	----	--

D3121-21RevE		Manufactured	No			140	Each	57.0000	18.0000			
--------------	--	--------------	----	--	--	-----	------	---------	---------	--	--	--



Bolt

Warehouse	Loc Qty	Loc Code
Location		

Main Warehouse

ST	57	
----	----	--

46032	40	
-------	----	--

50096	40	
-------	----	--

M174B1.250X02.000		Purchased	No			140	f	28.5600	10.4211			
-------------------	--	-----------	----	--	--	-----	---	---------	---------	--	--	--



17-4 SS Bar 1.250 x 2.00

Warehouse	Loc Qty	Loc Code
Location		

Main Warehouse

MAT	28.56	
-----	-------	--

109851	4.56	
--------	------	--

111787	24	
--------	----	--

9/30/09/10/06

18

9/30/09/10/06

18

2.72
7.7
52 09/00/03

DART AEROSPACE LTD		Work Order:	52465
Description: Bracket		Part Number:	D3121-111
Inspection Dwg: D3121	Rev: E	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.392	+0.002/-0.000	.392	✓			
0.75	+/-0.030	.750	✓			
0.375	+/-0.010	.375	✓			
2.14	+/-0.030	2.140	✓			
1.96	+/-0.030	1.960	✓			
0.280	+/-0.010	.285	✓			
3.330	+/-0.010	3.320	✓			
3.630	+/-0.010	3.633	✓			
R0.25	+/-0.030	1.250	✓			
R0.375	+/-0.010	1.375	✓			
Ø0.201	+0.005/-0.001	.200	✓			
0.100	+/-0.010	.096	✓			
4.580	+/-0.010	4.584	✓			
6.18	+/-0.030	6.175	✓			
5.89	+/-0.030	5.884	✓			
0.080	+/-0.010	.078	✓			
0.300	+/-0.010	.298	✓			
30°	+/-0.1°	30°	✓			
R0.25	+/-0.030	1.250	✓			
0.130	+/-0.010	.132	✓			
0.664	+/-0.010	.663	✓			
0.381	+/-0.010	.384	✓			
0.201	+/-0.010	.198	✓			
0.400	+/-0.010	.393	✓			
0.580	+/-0.010	.584	✓			
100°	+/-0.1°	100°				
0.032	+0.000/-0.010	.028	✓			

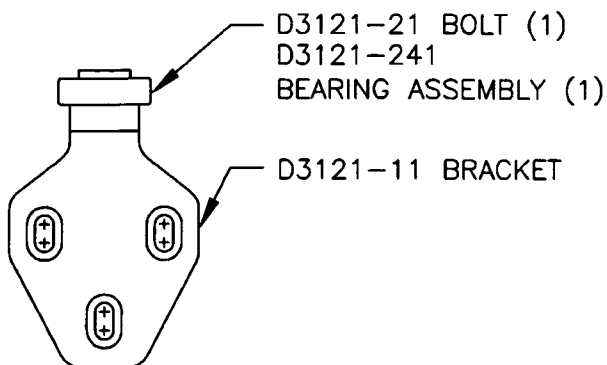
Measured by:	SL	Audited by:	DDP	Prototype Approval:	N/A
Date:	29/10/03	Date:	09/10/05	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.01.12	New Issue P/O D3121-141	KJ/RF	
B	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM	
C	06.06.14	Dwg Rev. updated	KJ/JLM	
D	08.01.16	Dimensions updated per Dwg Rev. E	KJ/EC/DD	
E	08.05.28	Tolerance revised for Ø0.201 dimension	KJ/DD	



DESIGN <i>A</i>	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>A</i>	APPROVED <i>A</i>	DRAWING NO. D3121	REV. E SHEET 1 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2
A	02.04.15	NEW ISSUE	
B	03.01.16	ADD RIDGES; ADD MAT'L PROP: FIX P/N ADD -141/-143/-144/-145/-146	
C	04.02.17	ADD CLEARANCE; USE -241 BEARING	
D	06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000	
E	07.11.07	ADD TOLERANCE TO 0.032 (DETAIL B)	

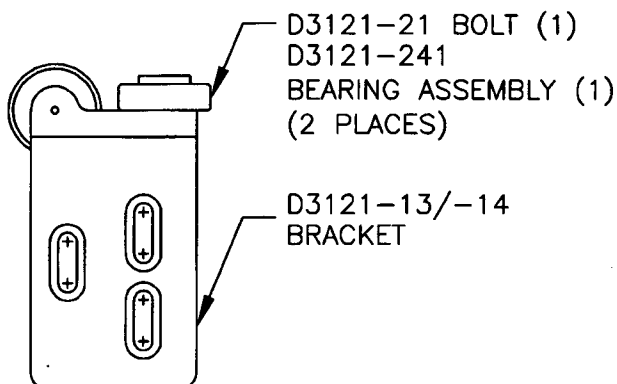
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D3121-041 BRACKET ASSEMBLY

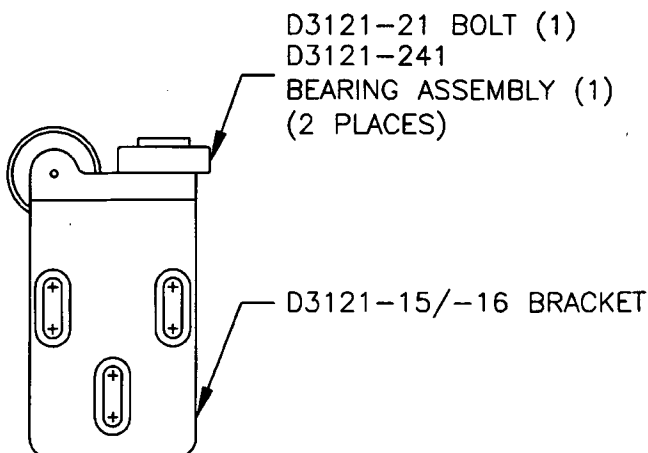
(REPLACES PREMIER P/N B30-23000-33)

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WITHOUT NOTICE
WORK ORDER
NO. 52465



**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-37/-38)



**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-35/-36)

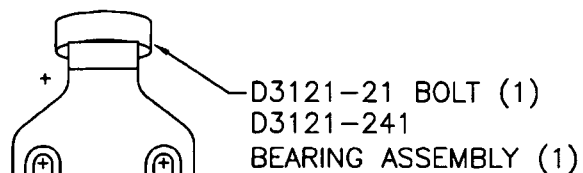
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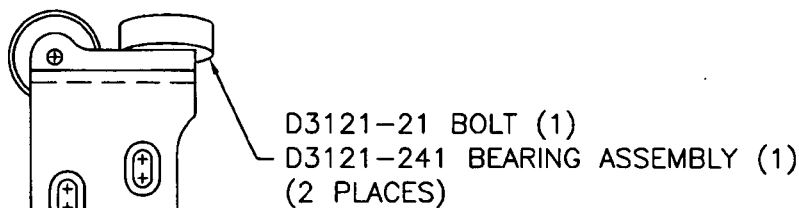
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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-111 BRACKET

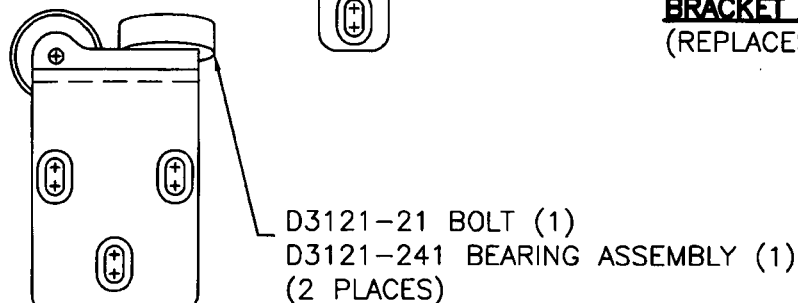
D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

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D3121-113/-114 BRACKET

D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-03/-04)



D3121-115/-116
BRACKET

D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-05/-06)

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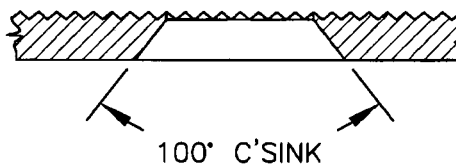
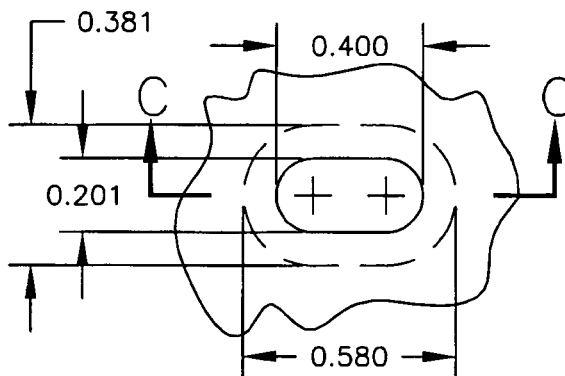
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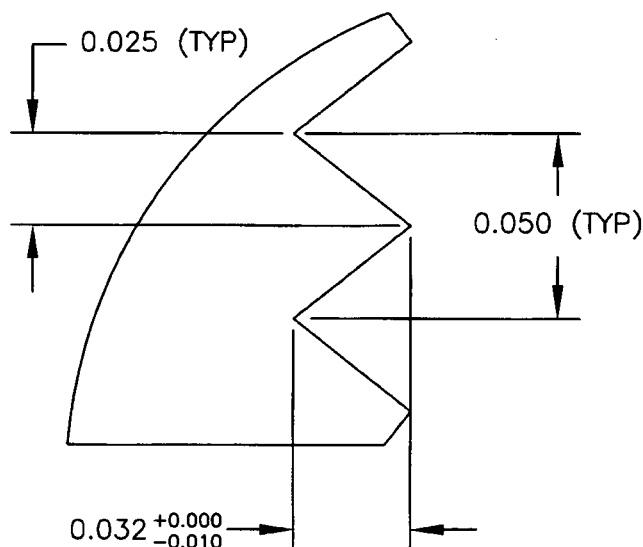
DETAIL A:
SLOT DETAIL
SCALE 2:1
VIEW ROTATED



SECTION
C-C

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07.11.07

DETAIL B:
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20



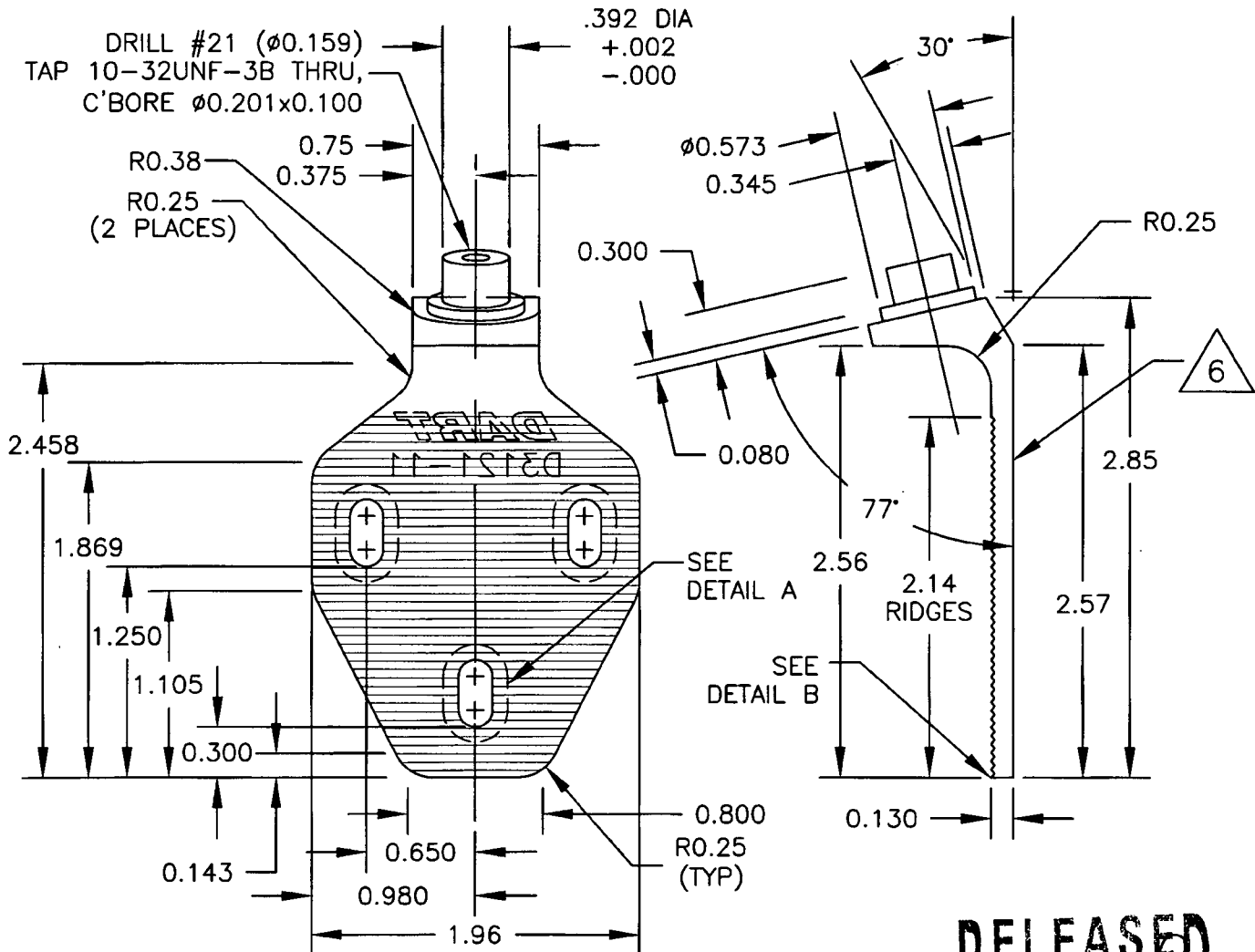
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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:1

**RELEASED**
07.11.07**D3121-11 BRACKET**

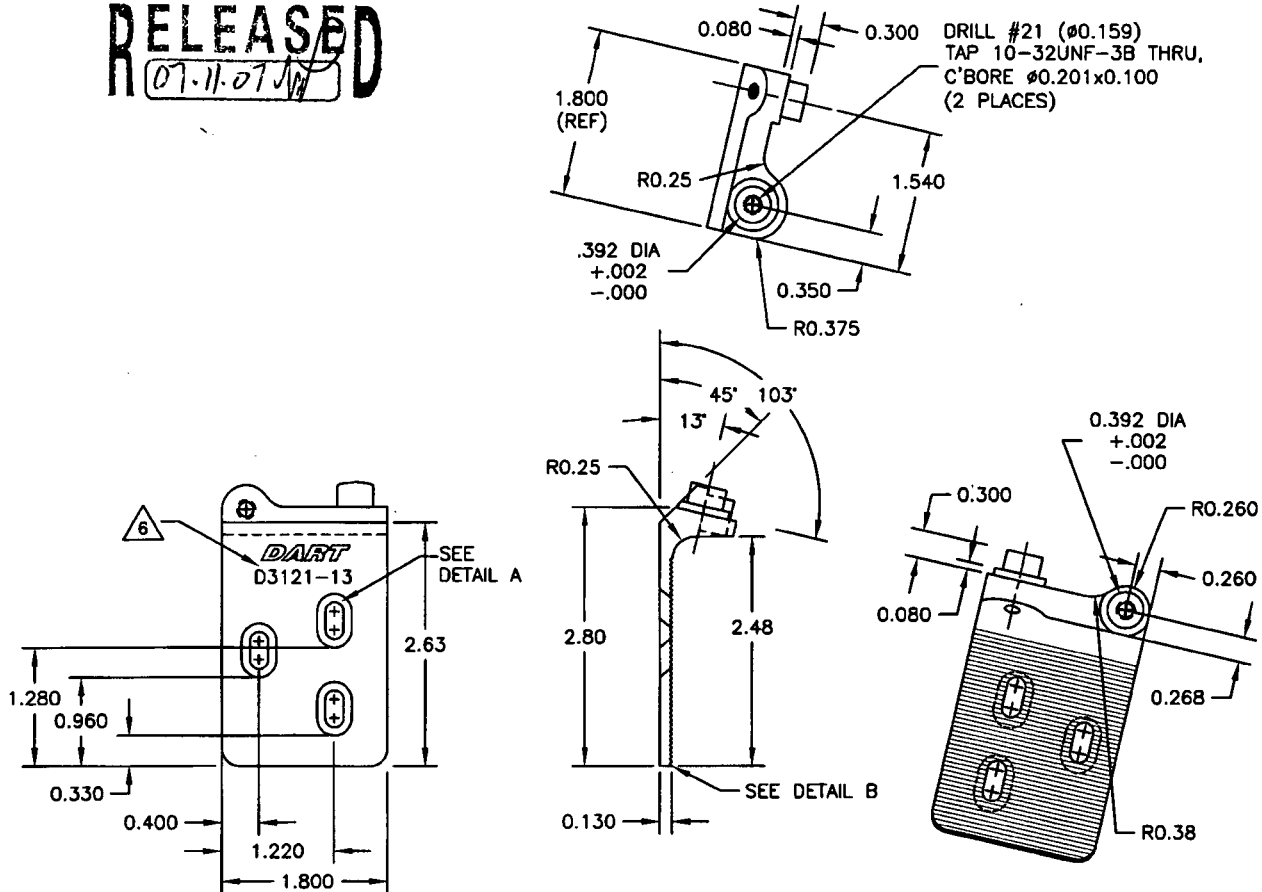
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2





RELEASED
07.11.07**D3121-13 BRACKET (SHOWN)****D3121-14 BRACKET (OPPOSITE)**

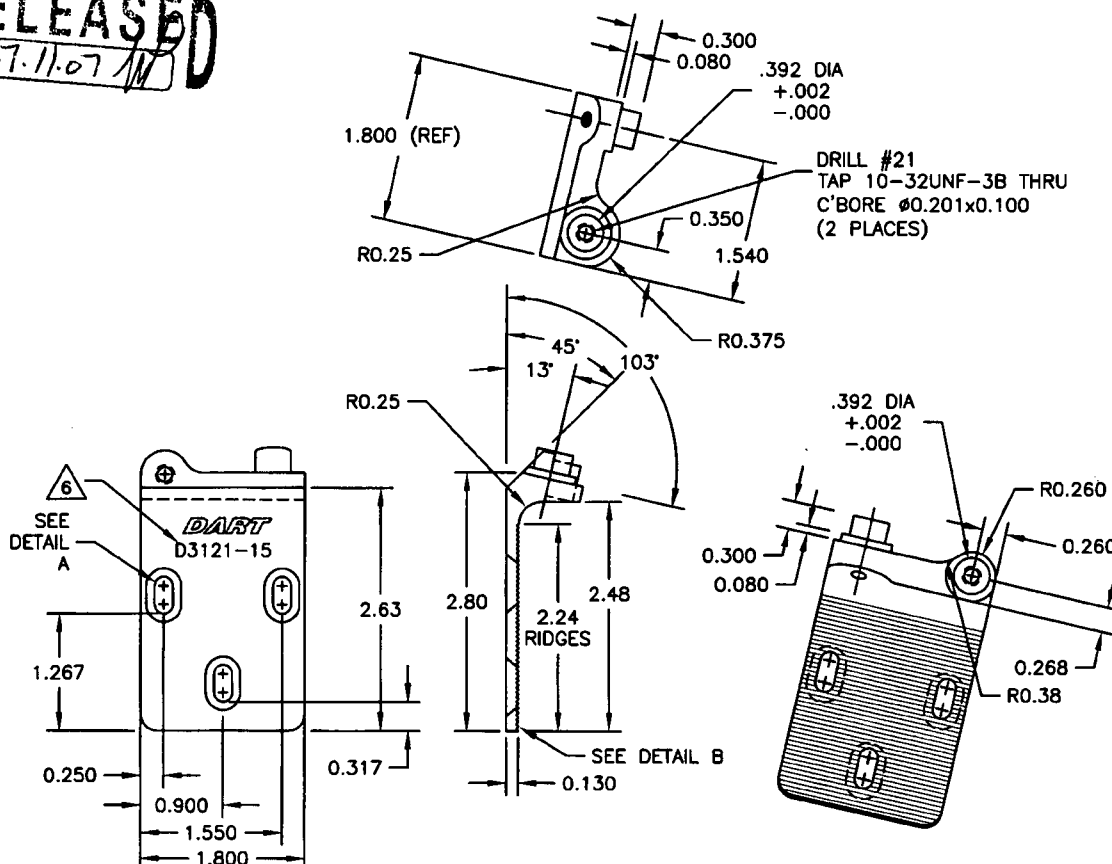
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
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DATE 07.11.07		TITLE BRACKET ASSEMBLY SCALE 1:2	



D3121-15 BRACKET (SHOWN)
D3121-16 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

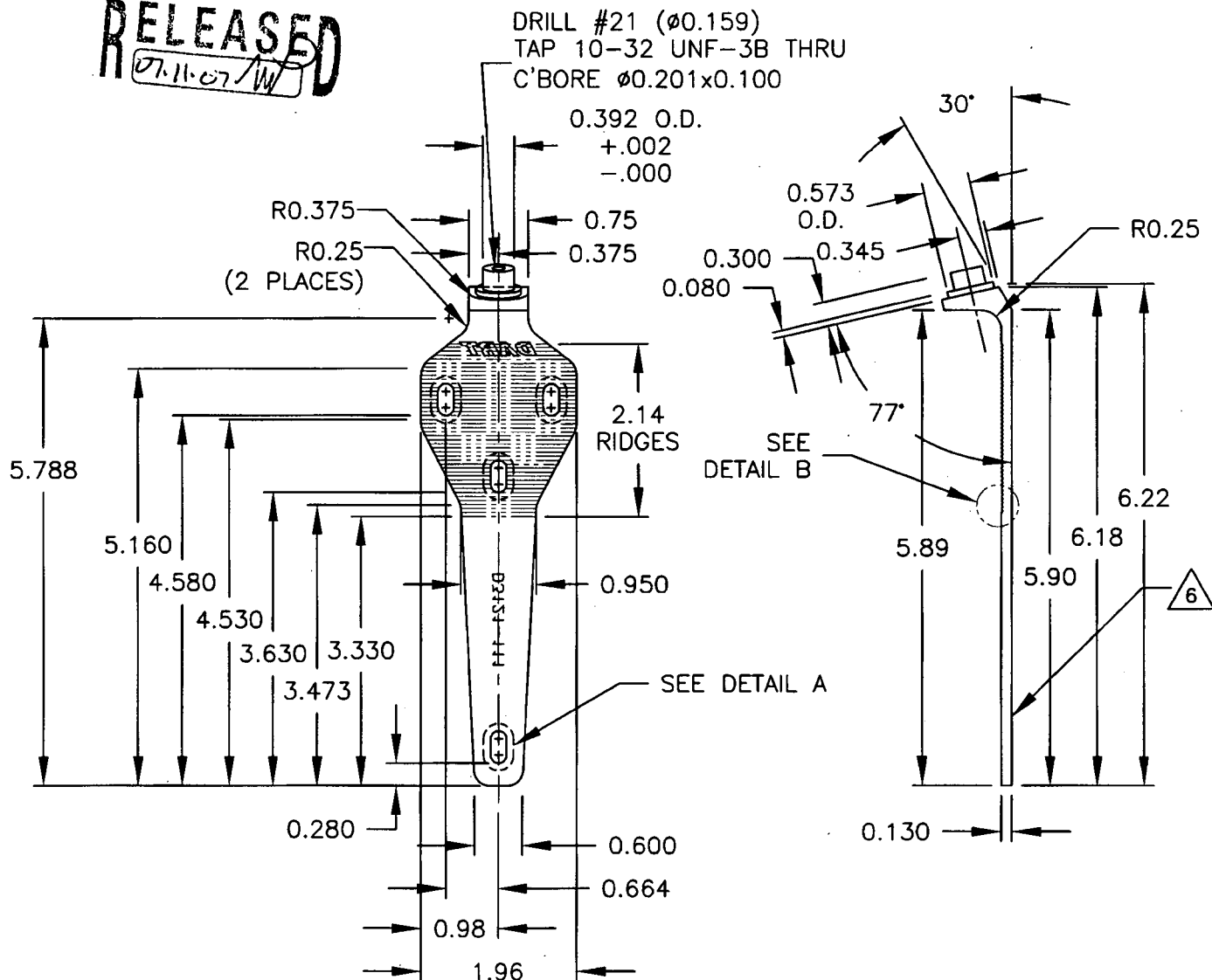
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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

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07.11.07/W



D3121-111 BRACKET

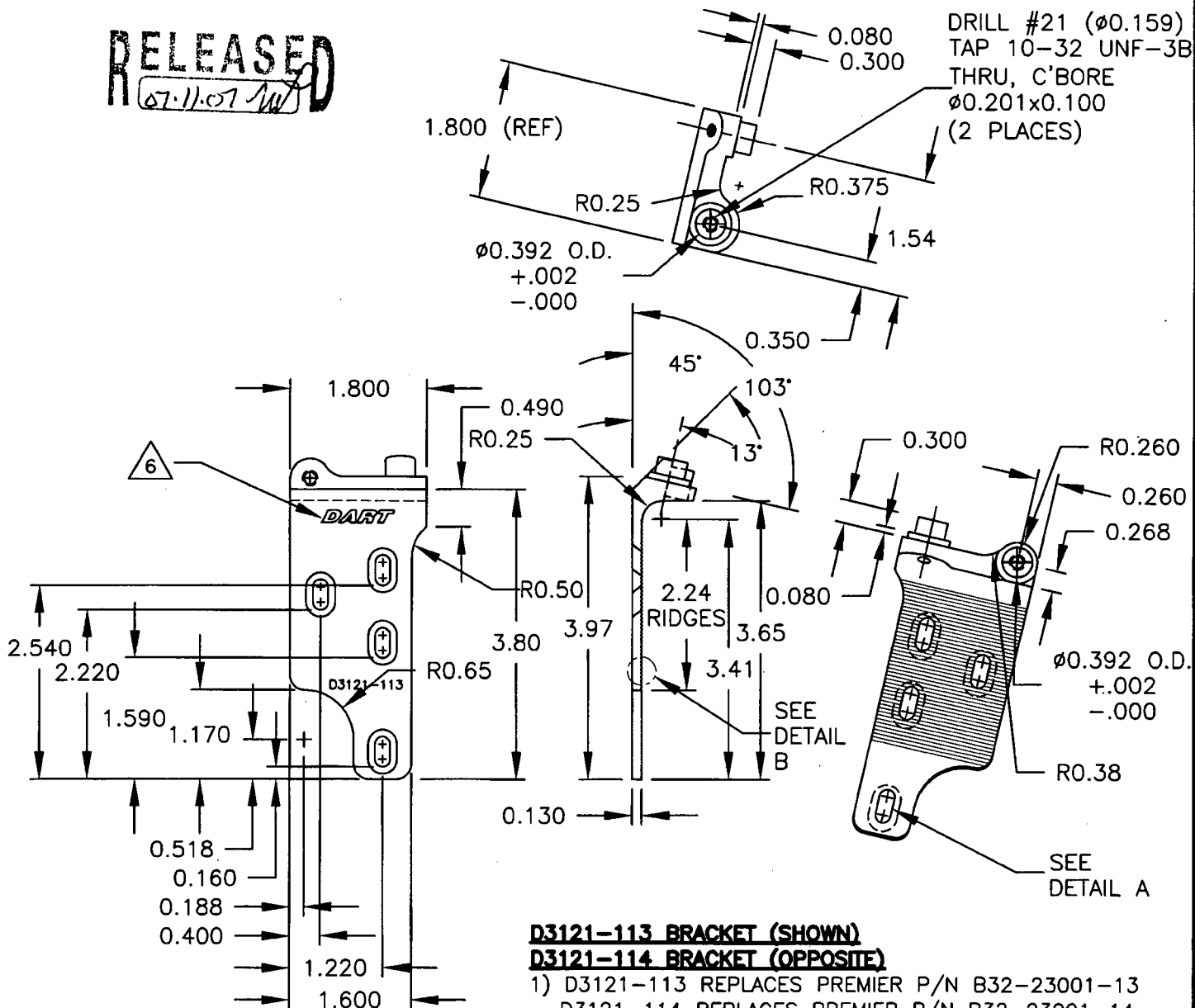
- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2

RELEASED
07.11.07**D3121-113 BRACKET (SHOWN)****D3121-114 BRACKET (OPPOSITE)**

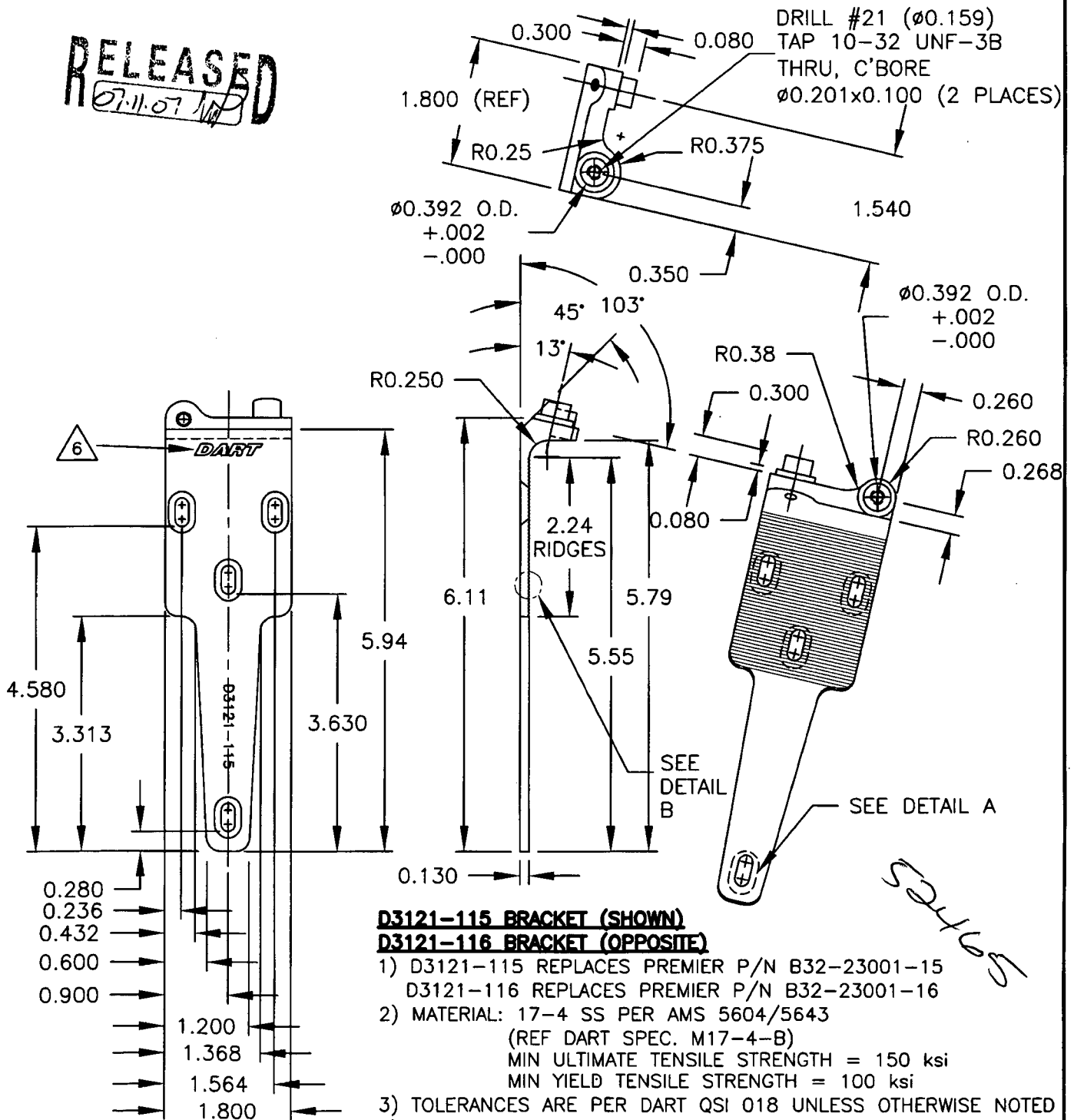
- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. E SHEET 9 OF 10
DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-115 BRACKET (SHOWN)
D3121-116 BRACKET (OPPOSITE)

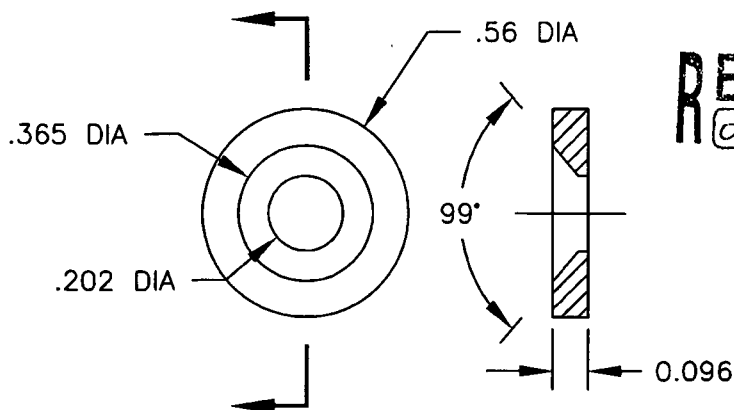
- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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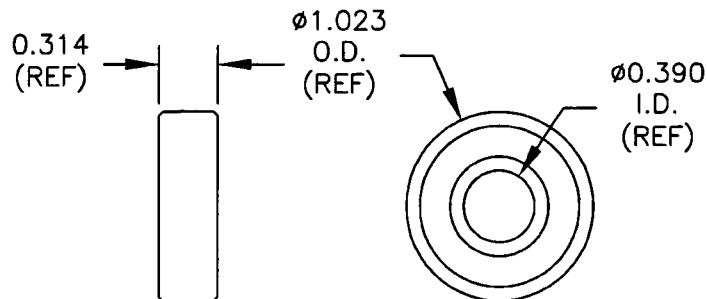


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DATE 07.11.07		TITLE BRACKET ASSEMBLY	SCALE 1:1



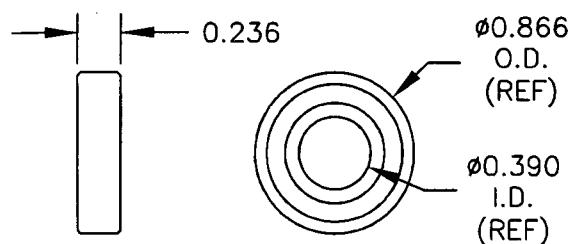
D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED
(REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



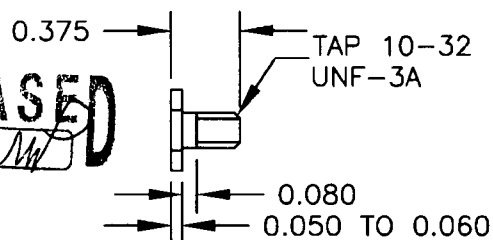
D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM
FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



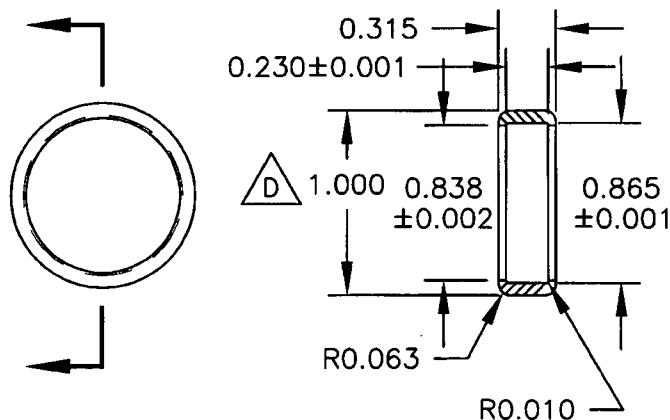
D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z
OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES



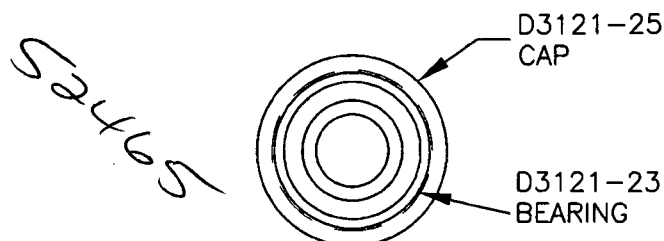
D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED
(REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, $\phi 1.25$
(REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES



D3121-241 BEARING ASSEMBLY (SCALE 1:1)

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